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EDUCATION

A MONTHLY MAGAZINE

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION

FRANK HERBERT PALMER, A. M., EDITOR

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EDUCATION

Devoted to the Science, Art, Philosophy and Literature of Education

VOL. XLV. MARCH, 1925 No. 7

Professional Preparation of the Elementary Teachers

W. D. ARMENTROUT, DIRECTOR OF TRAINING SCHOOLS
COLORADO STATE TEACHERS COLLEGE,
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MOST of the teachers in our better high schools are educated in colleges and universities and these institutions deny the accrediting relation to high schools unless they employ teachers with degrees. This compels the pre-service high school teacher to secure four years of college. But what about the pre-service elementary school teacher? There is no requirement demanding that the elementary teacher shall secure a degree. The elementary teacher in comparison to the high school teacher has more pupils, less pay, and less preparation. Do parents care less about their child's training during the first eight years than the last four? Is there any reason why a boy or girl should have better prepared teachers when they enter high school than when they enter elementary school?

What are the grounds for this distinction occurring sharply at the end of the eighth year or grade? One line of argument says a longer and better training has been demanded for

teachers of the high school because there were fewer of them and a more rigid selection was therefore possible and natural. There appears to be no valid reason for believing that this is true. Secondary teachers are fewer than elementary teachers because the number of secondary pupils has been proportionally smaller. If the inference of better training were correct, it would hold good also between grammar grade teachers and primary teachers when the same relative difference in the number of children exists. The same line of reasoning might be used between teachers of the twelfth and those of the ninth grades. There seems to be no good reason why teachers should be better prepared for their work simply because the group is small.

A second reason offered for the difference in the preparation of the elementary and high school teacher is that the work of the high school is advanced work and therefore requires advanced preparation; elementary instruction is elementary work and requires elementary preparation. But in what sense are studies elementary and higher? We must remember that elementary studies are elementary to human activity and not to our school years. In our colleges we find elementary calculus, elementary astronomy, elementary psychology and sociology, and elementary philosophy. We should recognize but one kind, and various degrees of education, the broad and narrow or, when looked at from the standpoint of time, the long course and the short one. The object of education is the same for every one whether he is in the elementary school, the high school, college or university; it is the conscious reorganizing of experience in order to shape it into the best possible tool to meet the present and anticipate the future. The teacher of reading and writing might think of her work as elementary, but the college or university can only do for us what the elementary school began doing—teach us to read. Every college teacher is doing the same thing that the elementary teacher is doing, namely, finding out whether his students can make for themselves meanings which they are challenged to make by the printed page. This is a process

which cannot end when the student leaves the college, but one which he must continue as long as he lives. According to Moore,[1] "Education is one and the same process in all grades of school, and that the activities which we learn to perform with the help and guidance of teachers are the very activities which we shall continue to perform until we die."

Teachers are apt to take pride in the fact that they teach the so-called "higher" subjects. To pass from an elementary school position to the high school is rated as promotion among many teachers, likewise the passing from junior high to senior high school, and being given all senior classes instead of freshmen. As long as the situation requires that a teacher rise by changing his work, instead of capitalizing his experience and improving his work, little genuine progress toward professional efficiency can be realized.

The historical development of elementary and secondary education explains much of our present distinction between elementary and high school teachers. Elementary and secondary education in America had distinctly different origins. Secondary education had its origin in the demands made by the colleges for preparatory schools. Naturally the work of these schools has been shaped by the college ideal. As the college changed, so the preparatory school changed. As the college took on more work it raised its admission standards and crowded more of its work back into the preparatory school. At the other end of the ladder stood the elementary school, at first satisfied merely with securing but a small degree of literacy; merely teaching children to read and write. Neither the Latin grammar school nor the academy nor the high school was at its origin regarded as the connecting link between the elementary school and the college. The relation was an after-thought which the university of Michigan did much to make effective. The secondary school in the beginning was the institution for the education of children from relatively the wealthy and cultured social groups while the

1 Moore, E. C., "What is Education?"

great majority of the people were to receive their education in the "common" elementary school. Thus we see that the elementary school has had no higher institution to cling to for sanction of its aims, methods and programs. The result has been that elementary education remained until the middle of the 19th century informal, unsystematic, and voluntary in respect to both parents and community.

Content and material of instruction in the elementary school was at first very meager and limited to the three R's. This naturally required very little preparation on the part of the teacher. Contrast the elementary school of today with that of even twenty years ago. The teacher in every grade has a broader and richer field and needs a larger vision. In the past the elementary schools were limited to the tools of learning, then came geography, language, music, history, nature study, civics, literature and hygiene. Now we are revising these studies, adapting them to the interests, abilities, and real needs of boys and girls and we are adding newer subjects such as industrial arts, general science and social science. We shall always find it necessary to teach the three R's in the elementary school, and in addition, we must use the material which is provided in science, literature, and history for the purpose of forming certain ideals and to give a new and meaningful significance to the facts of every-day living. And as we come to recognize more clearly the function of education in a democracy, we shall stress more and more that type of education which will explain the meaning and purposes of a democratic society and which will give larger opportunity for actual participation in the duties of citizenship, even while boys and girls are still enrolled in our elementary schools. It should be apparent to all that the professional preparation of it must not be determined by the traditional and narrow horizon of even ten or twenty years ago.

Another argument not always stated but generally implied, is that the high school teacher must be better trained than the elementary teacher, for the high school teacher is a teacher of

a selected group destined to furnish the leaders of society. This smacks of a European philosophy of education and one not in accord with our American philosophy of education. If we really believe in education and democracy, then we must realize they are bound up in an endless chain of cause and effect. More education, more democracy, more democracy, more education. Universal public education can exist only in a democratic society. A democratic education is an education equally genuine and thorough for all alike and modified only by the proved abilities and needs of the child. This means the present standard of training for the high school teacher must not only be maintained but even raised, and it is equally obvious that elementary instruction cannot contribute its share until the training of elementary teachers is fully established on a like basis.

The American child has a right to demand that at every level of his instruction he will have a teacher especially trained to meet the peculiar problems of that particular period. We must cease thinking of our public education as broken up into two distinct periods and systems. We must begin to think of our American public school system as a twelve-year period of growth and training for every child, taught by teachers selected and trained for this purpose; a system in which every course must be worth while in its contribution to the growth of the pupil as far as it is pursued; a system in which teachers find equal distinction of service and reward alike within all grades and subjects of instruction.

In concluding a discussion of the professional training of the elementary teacher we are naturally confronted with the problem of the function of a teacher-training institution.

The functions of a teacher-training institution are to make it possible for in-service teachers and pre-service teachers to gain a thorough knowledge and appreciation of subject matter as a means of interpreting life more fully; to gain a thorough knowledge of educational biology and psychology that they may understand and appreciate the nature of the child,

and the laws of learning upon which the principles of method are based; to gain real insight into a pragmatic philosophy of education which determines the educational ideals and aims; to understand an educational sociology which reveals the school as a social institution and the child as a vital part of the social environment; to acquire the technique of teaching through closely supervised student teaching and directed observation; to feel themselves as a vital and necessary part of the school organization through a working knowledge of the administration and organization of the public school system.

There are certain facts and principles which teachers should know, regardless of whether they are in the elementary or secondary school, whether they are supervisors, principals, or superintendents. Below is an attempt to list the minimum essentials[2] that every teacher should master. There will be an overlapping between these and a certain amount is necessary to establish proper relationship between the various subjects. A certain amount of overlapping is a good thing as it serves as a "warming-up" period for an attack on the new problem. No attempt is made to list these essentials in order of importance.

1. Knowledge of the child; individual differences in rate and comprehension of learning; in previous training; in mental age, ability, interest, and sex.

2. An intelligent conception of what the minds of the pupils are doing in learning subject matter or acquiring skill—the fundamental laws of learning.

3. Measuring the results of teaching—use of standard tests.

4. Aims, functions, and purposes of education.

5. The historical development of the modern public school as a social institution and its relation to other social institutions of today.

2 Frasier, G. W. and Armentrout, W. D., "An Introduction to Education."

6. The organization of public education; units of administration and methods of control.

7. A knowledge of the relation of subject matter to the needs of the child and the needs of society; the relating of subject matter to the aims and functions of education.

8. The various ways of presenting subject matter, the various types of classroom procedure; inductive and deductive, object, socialized, appreciation, drill, review, etc.

9. A knowledge of the problem of the control of the behavior and conduct of pupils in school; understanding of proper standards of conduct according to the age of pupils and school conditions; understanding of rational measures of discipline that are adequate to maintain the standards set up.

10. A knowledge of the physical defects prevalent among school children and methods of preventing and detecting them.

These ten minimum essentials cannot be satisfactorily mastered in less than four years of preparation in a teacher-training institution which requires four years of high school for entrance. To expect anything less is to expect the impossible.

Religious Education—A New Start

JOSEPH V. COLLINS, STEVENS POINT, WISCONSIN.

IT is said on good authority that twenty-seven millions in this country are today receiving no religious instruction. With this statement may be coupled an equally shocking one, namely that those who are in Sunday School are getting religious education of a most superficial and unsatisfactory character. Probably one of the principal reasons why the twenty-seven millions are not seeking this education is because of its inferiority.

Now the weakness in present-day religious instruction is not found in the Helps provided by our various Boards; it is not found in a lack of the spirit of service on the part of the workers, or of indifference on the part of pastors and church authorities; the trouble does not lie in the unwillingness of the church to provide the funds needed to procure religious instruction for both old and young; neither does it lie in the fact that we do not have workers enough; finally the trouble with religious education is not due to the worldiness of the masses, but the worldiness of the masses is largely due to the present form of religious instruction!

Look at present nation-wide condition. Bandits, kidnapers, profiteers of all sorts, lawbreakers of many species, and proletarian radicals are on every hand. Society, almost wholly bent on pleasure, soon becomes sated with each new interest and is constantly demanding something more outrageous. All this shows just one thing. Secular education even with its thousands of facets reflecting our Christian civilization is failing on the moral side. The fact is that the hope of the nation lies in effective religious education. But our religious education stands today where it stood sixty years ago as regards two main features—organization and time given to Bible study. The nation's house is on fire and we are using the bucket brigade to put the fire out!

The state gives the church one day in seven for religion and the church takes about twenty minutes of this time (allowing for losses) for study of Bible truths, the teaching being mostly of the weak didactic form at that. These study periods are separated by 167 2/3 hours intervals. No wonder there is lack of continuity in the work and a dearth of results. What is needed, what is essential, is a half day (3 hour) session conducted along the lines of the secular school, with a relatively small number of far better trained teachers in charge. The evangelistic side of the instruction by this plan can be looked after by the ablest workers in the church reaching all of the members of schools. In such Sunday Schools the studying necessary would be done *in school* and with the powerful incentive that all the other pupils were studying at the same time. Thus the present difficulty of getting the children to study their lessons would be done away with, to the great relief of all concerned. Sundays so spent would no longer be the bug-bear they often have been in the past.

If the Sunday School were organized and conducted as it should be the state might easily be induced to make attendance on it compulsory for all children except those whose parents reported themselves as "conscientious objectors.' The nation's leaders see the dire need of this education and could persuade the country of the absolute necessity of securing it. But we may be sure the state will never make compulsory attendance on so inferior an institution as the present-day Sunday School.

The obligation to improve religious education should weigh very heavily on the consciences of leaders of the Protestant churches. Both the future of the country and the future of the church itself depend on prompt and wise action. People who have not been trained in a knowledge of religious truth and the Bible will not attend church. They cannot understand and appreciate its services nor will they see the need of sending their children to Sunday School. There is another and highly suggestive side of this question. If the Protestant church could show the Catholics that a satisfactory solution of the problem of religious education can be secured by using

half of Sunday to acquire it, then the Catholic Church might see its way clear to giving up its parochial system. It must be apparent to all that taxing Catholics for the support of the public schools when they send their children to their own self-supported parochial system works a great injustice. Two wrongs do not make a right. By logic's law of the excluded middle there should be a third right thing which could be substituted for the two wrongs.

It looks very much as though the teachers of America would have to use their knowledge and influence to convince the church that education is self-activity and that any education of whatever kind to be worth while must be paid for in time and effort by the learners. Not a few clergymen fatuously believe the mere reading of the Bible in the public schools would solve the problem of religious education. Such people are hopeless; but there must be tens of thousands of forward-looking and sensible religious leaders in this land who could be persuaded that a whole new start in religious education is essential, and who if they could be convinced of this need would have the initiative to take the steps necessary to remedy the present impossible situation. Reader, will you not try to lay the case before your friends interested in religious education and appeal to them to make *this new start.*

Curricula-Making in State Teachers Colleges

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Shall the curricula of the State Teachers Colleges be pre-determined by the Graduate Schools of the Liberal Arts Colleges?

THIS is by no means a hypothetical question, but a very real one, representing the definite trend in curricula-making in our State Teachers Colleges. This course has been and is being made apparently necessary by these colleges doing their very best to become "standard." Now standardization among Teachers Colleges is certainly very desirable, and probably as badly needed as among any class of educational institution. But the standards must of a certainty be true standards of teacher training.

This naturally brings us to the question: Are the standards of teacher training peculiar standards? Or—more tersely—is there anything to this teacher training business, anyway? Just as we answer this question, are we prepared to answer the larger previous one? The academic world—and the universities in particular—have never quite accepted the theory of teacher training, evidenced by the fact of the premium placed upon university graduates as teachers. If this point of view is to prevail, then the teachers colleges are an anomaly, and were better abolished; as a matter of fact, will be abolished; for in the war for public support of our institutions, the unnecessary is bound to go. Therefore, the establishing of these teachers colleges, in every detail, upon sound principles becomes a most necessary thing if they are to exist. As this writer sees the matter, for the teachers colleges simply to conform to the standards of the Liberal Arts Colleges, is to hurry to their own destruction. There is already very clear

evidence of inclination to make junior colleges of the teachers colleges—which is precisely what they should be if their *summum bonum* of existence is to prepare students for the very important matter of continuing their scholastic life in the Liberal Arts Colleges. This is not meant in any spirit of invective. The writer has no case against the universities, as such, being a graduate of what he considers to be the greatest state university in the United States, and having taught in another state university for a period of six years before graduating into a teachers college faculty. If the writer has a case against any one, it is against the teachers colleges, themselves, for allowing their own identity to be threatened in this matter of curricula-making.

There would seem to be three eventualities in the answering of our question. 1. Conformity to Liberal Arts requirements, thereby becoming thoroughly "standard," but at the same time losing our identity and signing a death warrant as senior colleges. 2. A relinquishment of iron-bound requirements for graduate study, on the part of Liberal Arts Colleges, and recognition for all so-called professional and occasional work done in teachers colleges. 3. A distinctive graduate school in teacher training, along the lines now pursued by such schools as Peabody and Teachers College of Columbia.

Blind, unquestioned, reactionary conformity would seem to be impossible—if any progress is to be made; but in all candor, this would seem to be just what we are guilty of when our goal in the making of our curricula is the unquestioned entrance of our graduates to graduate schools of the liberal arts colleges anywhere. While this is a most commendable goal, as compared with the weak efforts formerly attempted by normal schools, it is most surely not the great end of teacher training.

There would seem to be some evidence of the university graduate schools opening up a little more to teachers college graduates than in times past. Of course, there will always be certain universities that choose to keep their graduate departments more or less hallowed to ancient tradition; but some of

our large western universities are plainly viewing the matter of curricula subject-matter in a broad way. The colleges in the Middle West are decidedly more liberal in their membership standards than formerly. The acceptance of professional courses in education, as well as of occasional subjects, is the bone of contention. By occasional subjects is meant those subjects which have been accepted by the several states in their public schools, but which have not been universally included in the college organization of the large universities—such subjects as Public Speaking, Art, Music, Manual and Domestic Arts and Sciences, etc. Whatever we may think, individually, about the scholastic virtue of such subjects, they are an important part of our public school curriculum, and teacher-training institutions have no choice as to the matter of training competent teachers for them. Refusing full credit in our teachers colleges for work done in these branches is potently discouraging such work and forcing condidates for teaching these subjects to get their preparation otherwhere. Again we are questioning, in such a procedure, the fact of teacher training.

The policy of developing a distinct graduate study for teachers is quite the most popular with teacher-training folk. There can be no possible protest against such a policy. In fact, it is already coming as a matter of course. If there is a distinct under-graduate teacher training, it would be difficult to see why it would not hold as well, or even better, for a graduate study. Notwithstanding the common sensibleness of this point of view, it seems to the writer that a combination of numbers one and two of our conclusions represents a more ideal consummation. Beyond any doubt there will in the next few years be many more graduate teachers colleges. Probably within the next five years one of our Texas Teachers Colleges will be designated for graduate study. But there will always be strong graduate departments in the large universities which furnish the most desirable graduate study for teachers. And while some teachers college some day may present a graduate department in Biology, conceived and devel-

oped from the standpoint of teacher training, that will be superior to that now to be found in the University of Chicago, it will be a good many years; consequently, the teachers college graduate school with a freer access in exceptional cases to the graduate departments of the larger universities would seem to be the ideal consummation.

Our question has led us rather far afield, but after all it is quite the same field. The answer to the question what are we going to do with our graduates, is going to help materially in formulating our curricula. It is a pertinent question, and one which is being dangerously answered at the present time, as the writer sees it, in that Liberal Arts standards are being accepted as the great desideratum in teachers colleges.

Some Implications of the Origin of the Nordic Tendency

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THE popular conception of Nietzsche's Superman has been derived from the history of the German army devastating Belgium. But this is not the Superman that Nietzsche's philosophy justifies. It is the object of this paper to set forth the plain facts about the Superman in Nietzsche's philosophy, as a basis for the modern Nordic tendency. There is no better way to do this than to go to the philosopher's own statements and let him tell us just what he means.

"A new light hath dawned upon me. Not to the people is Zarathustra to speak, but to companions!"[1] He shall not be the herd's leader; his office shall be to draw many from the herd. The herd must be angry with him; a robber shall he be called by the herdsmen.

"Herdsmen, I say, but they call themselves the good and just. Herdsmen, I say, but they call themselves the believers in the orthodox belief."

"Behold the good and just. Whom do they hate most? Him who breaketh up their tables of values, the law-breaker—he, however, is the creator."[2]

"Behold the believers of all beliefs! Whom do they hate most? Him who breaketh up their tables of values, the law-breaker—he, however, is the creator."

"Companions, the creator seeketh, not corpses—and not herds or believers either. Fellow-creatures the creator seeketh—those who give new values on new tables."[3]

1 Zara., p. 19.
2 Zara., p. 19.
3 Zara., p. 20.

The above passages give us an insight into the characteristics of the Superman. He is not to be a herdsman, a leader of the masses, nor is he to discourse unto the people; but rather with the creators, the reapers, and the rejoicers is he to associate. It is to the creators that he is to show all of the stairs to the Superman. To the lone dwellers is he to sing his song, unto those who have ears for the unheard will he make the heart heavy with his happiness. He makes for his goal, he follows his course, he leaps over the loitering and tardy will. His on-going is the down-going of the orthodox believers.

He seeks solitude because the people, the masses, do not understand what is great—that is to say, the creating agency. They have a taste for all representers and actors of great things, not an appreciation of the creator of new values. "Where solitude endeth, there beginneth the market-place; and where the market-place beginneth, there beginneth also the noise of the great actors, and the buzzing of the poison-flies."[4]

"Around the devisers of new values revolveth the world—invisibly it revolveth. But around the actors revolve the people and the glory: such is the course of things."[5] For the actor, "To upset that meaneth with him to prove. To drive mad—that meaneth with him to convince. And blood is counted by him as the best of all arguments."[6] Hence, war of the masses and not of the Superman. "Spirit, hath the actor, but little conscience of the spirit. He believeth always in that wherewith he maketh believe most strongly—in himself! Tomorrow he hath a new belief, and the day after, one still newer. Sharp perceptions hath he, like the people, and changeable humours. Full of clattering buffoons is the marketplace—and the people glory in their great men! These are for them the masters of the hour."[6a]

4 Zara., p. 57.
5 Zara., p. 58.
6 Zara., p. 58.
6a Zara., p. 58.

It is only away from the market-place and from fame that taketh place all that is great. Away from the market-place and from fame have ever dwelt the creators of new values. The Superman must flee into solitude. He must not live too closely to the small and the pitiable. He must flee from their invisible vengeance; since toward him they have nothing save vengeance.

Superman, "Exhausted I see thee, by poisonous flies; bleeding I see thee, and torn at a hundred spots; and thy pride will not even upbraid. Blood they would have from thee in all innocence; blood their bloodless souls crave for, and they sting, therefore, in all innocence. Too proud art thou (Superman) to kill these sweet-tooths. But take care lest it be thy fate to suffer all their poisonous injustice."[7]

"The beauty of the Superman came unto me as a shadow." "Ye lonesome ones of today, ye seceding ones, ye shall one day be a people: and of you who have chosen yourselves, shall a chosen people arise:—and out of it the Superman."[8] "Greater ones, verily, have there been, and higher born ones, than those whom the people call Saviours, those rapturous blusterers! And by still greater ones than any of the saviours, must we be saved, my brethren, if ye would find the way to freedom! Never yet hath there been a Superman. Naked have I seen both of them, the greatest man and the smallest man!—all too similar are they still to each other. Verily, even the greatest found I all-too-human!"[9]

We (the Superman) must build our nest on the trees of the future; eagles must bring the lone ones food in their beaks. Not the food of which the impure could be fellow-partakers; a food that would be fire to them must we eat.

No abodes of the Superman shall be ready for the impure. For such an abode would be an ice-cave to their bodies. To them our happiness would be torment. "As strong winds will we live above them, neighbors to the eagles, neighbors to the

7 Zara., p. 59.
8 Zara., p. 89.
9 Zara., p. 108.

snow, neighbors to the sun, thus live the strong winds. And like a wind will I one day blow against them, and with my spirit, take the breath from their spirit: thus willeth my future."[10]

"And verily, ye good and just! In you there is much to be laughed at, and especially your fear of what hath hitherto been called 'the devil'! So alien are ye in your souls to what is great, that to you the Superman would be frightful in his goodness! Ye highest men who have come within my ken! This is my doubt of you, and my secret laughter: I suspect ye would call my Superman—a devil!"[11] From those highest and best ones of the orthodox belief the Superman wishes to soar above. Above their height does he long to be up, out, and on to the Superman. The wise and knowing ones (the orthodox) would flee from the solar glow of the wisdom in which the Superman joyfully baketh his nakedness.

"When I came unto men for the first time, then did I commit the anchorite folly, the great folly: I appeared on the market-place. And when I spoke unto all, I spoke unto none. . . .
"With the new morning, however, there came unto me a new truth: then did I learn to say: Of what account to me are market-place and populace and populace-noise and long-populace-ears?"[12]

"Ye higher men, learn this from me: On the market-place no one believeth in higher men. But if ye will speak there, very well! The populace, however, blinketh: 'We are all equal; man is man before God—we are all equal.'"[13]

"Before God!—Now, however, this God hath died. Before the populace, however, we will not be equal. Ye higher men, away from the market-place! Before God!—now, however, this God hath died! Ye high men, this God was your greatest danger. Only since he lay in the grave have ye again arisen. Now only cometh the great noontide, now only doth

10 Zara.
11 Zara., p. 174.
12 Zara., p. 350.
13 Zara., p. 350.

the higher man become—master! Well, take heart! ye higher men! now only traveleth the mountain of the human future. God hath died: now do we desire—the Superman to live."[14]

"Have ye courage, O my brethren? Are ye stout-hearted? Not the courage before witnesses, but anchorite and eagle courage, which not even a God any longer beholdeth?"[15]

"Towards the few, the long, the remote go forth my soul and my seeking: of what account to me are your many little short miseries?"[16]

Summarily, the Superman is made away from the masses of humanity, his abode is on the heights where superiority dwells. His dwelling-place is a place prepared for the prepared. The populace cannot understand him because he transcends their short-sightedness. He is a creator of new values, an image breaker, a builder who always lives in the future to the common man. This loneliness calls for a creation of new values, the transcending values for the Superman. And in order to attain unto these new values one must cast off the values set by the masses—the Christian values; the belief in the God of the Christians. This is absolutely essential before the Superman can appear.

But when the orthodox views are cast off and new values set for the superior man, at that moment the Superman begins to emerge and write new values on new tables—the values for the Superman. As to "Equal rights for all!—this is the most extraordinary form of injustice, for with it the highest men do not get their due."[17] There must be a new form of estimating man. We must answer the questions: (1) How much power has he got; (2) how manifold are his instincts; (3) how great is his capacity for communication and assimilation?

"It is by the loftiest and strongest instincts, when they break out passionately and carry the individual far above and beyond the average, and the low level of the gregarious con-

14 Zara., p. 351.
15 Zara., p. 353.
16 Zara., p. 354.
17 The Twilight of the Idols, p. 266.

science, that the self-reliance of the community is destroyed; its belief in itself, its backbone, as it were, breaks; consequently, these very instincts will be most branded and defamed. The lofty independent spirituality, the will to stand alone, and even the cogent reason, are felt to be dangerous; everything that elevates the individual above the herd, and is a source of fear to the neighbor, is henceforth called evil; the tolerant, unassuming, self-adapting, self-equalizing disposition, the mediocrity of desires, attains to moral distinction and honour."[18]

In order to stop the degenerating tendencies of man we must fix our hopes in a new philosophy. There is no other alternative. There must be minds strong and original enough to initiate opposites of value, to transvalue and invent eternal valuations, in forerunners, in men of the future, who in the present shall fix the constraints and fasten the knots which will compel milleniums to take new paths.

Such minds, "In their passion for knowledge, will have to go further in daring and painful attempts than the sensitive and pampered taste of a democratic century can approve? There is no doubt; these coming ones will be least able to dispense with the serious and not unscrupulous qualities which distinguish the critic from the sceptic: I mean the certainty as to standards of worth, the conscious employment of a unity of method, the wary courage, the standing alone, and the capacity for self-responsibility; indeed, they will avow among themselves a delight in denial and dissection, and a certain considerate cruelty, which knows how to handle the knife surely and deftly, even when the heart bleeds."[19]

Such men will be the real philosophers, the commanders, the lawgivers. They will say: thus shall it be, and thus it shall be. They will determine the "whither" and the "why" of mankind, and thereby set aside the previous labor of all philosophical workers; and all subjugators of the past—they

18 Beyond Good and Evil, pp. 124-125.
19 Beyond Good and Evil, pp. 149-150.

will grasp the future with a creative hand and whatever it is and was, becomes for them thereby a means, an instrument, and a hammer. Their knowledge of knowing is a creating, their creating is a law-giving, their will to truth is—Will to Power.

To think and to take a matter seriously and arduously is one and the same thing to such a man. But coarse feet must never tread upon such carpets. The doors remain closed to intruders, though they may rush and break their heads thereon. It takes many generations to prepare for the coming of a philosopher, each of his virtues must have been separately acquired, matured, transmitted, and embodied; "not only the bold, easy, delicate course and current of his thoughts, but above all the readiness for great responsibilities, the majesty of ruling glance and contemning look, the feeling of separation from the multitude with their duties and virtues, the kindly patronage and defence of whatever is misunderstood and calumniated, be it God or devil, the delight and practice of supreme justice, the art of commanding, the amplitude of will, the lingering eye which rarely admires, rarely looks up, rarely loves."[20] It is only to such that Zarathustra is able to express himself concerning ultimate problems. It is them alone that he inspires with activity on behalf of this better theory. Such men or rather minds are strong, healthy, hard, and above all noble enough for him to give them the hammer with which to remold the whole world. They are, more, they are higher, they are of a different origin to the common man.

Such a man is one "who constantly experiences, sees, hears, suspects, hopes, and dreams extraordinary things; who is struck by his own thoughts as if they came from the outside, from above and below, as a species of events and lightning flashes peculiar to him; who is perhaps himself a storm pregnant with new lightnings; a portentous man, around whom there is always rumbling and mumbling and gaping and something uncanny going on. A philosopher: alas, a being who

20 Beyond Good and Evil, pp. 156-157.

often is afraid of himself—but whose curiosity always makes him come to himself."[21]

This new philosopher, the establisher of new standards for the superior man, is the foundation upon which all of Nietzsche's philosophy is built. He holds that man's evolution comes about through mental development, spiritual development, and the cultivation of the will to Power. To do this, man must climb over the prostrate forms of his weaker brothers. The Superman, the man of unusual ability, cannot afford to be a slave to pity, sentimental feelings of sympathy, charity or any other standards of value set by the masses. All of these he must sternly repress in the interest of the larger ideal. He must let the superfluous go the way of the weak and let swift death overtake them. He must reach out and take hold of the future—write new values on new tables of stone.

Nietzsche had a mental breakdown before he worked out his system of education by which the Superman was to make a Super-race. We are looking for this solution to be achieved through the Nordic I. Q. advocates. However, we are going to expect a more sympathetic approach than was intimated by Nietzsche, the master of our Nordic friends.

21 Beyond Good and Evil, pp. 258-259.

High School Commercial Graduates as Students in Collegiate Schools of Commerce

R. G. WALTERS, HEAD OF THE DEPARTMENT OF COMMERCE, GROVE CITY, PA.

IN a recent article in EDUCATION, I endeavored to point out some possible causes for graduates of high school commercial departments falling short of the requirements for entrance to collegiate schools of commerce and business administration. Of equal interest to both high school principals and college instructors are the records of those graduates of secondary commercial courses who succeed in matriculating at college.

It is commonly accepted that the best preparation for the Arts Course in college is the classical course in high school; that the best preparation for the Science Course in college is the scientific course in high school. It would seem logical, therefore, to suppose that the proper preparation for the work of the collegiate school of commerce is the training received in the high school commercial course, and it was with the purpose of arriving at some conclusion in the matter that the present study was made.

The grades of 145 students, the total number enrolled in the Department of Commerce at Grove City, were carefully analyzed, and an examination was made of entrance credentials. Of these 145 students, it was discovered that

45 were graduates of high school commercial courses.
26 were graduates of high school scientific courses.
16 were graduates of high school classical courses.
1 was a graduate of a high school agricultural course.
57 were graduates of general or academic courses.

All four classes in college were, of course, represented in the group studied, but in order to simplify the investigation

as much as possible, the average grade of each student was considered, regardless of whether he was a Senior, Junior, Sophomore, or Freshman. The first startling result was obtained when it was found that the grades of

High school classical graduates averaged	87.4%
High school commercial graduates averaged	85.4%
High school scientific graduates averaged	84.1%
High school agricultural graduates averaged	80.8%
High school general graduates averaged	78.1%

The foregoing would seem to indicate that any specialized courses, even though they be so widely divergent as are the classical and commercial, prepare a student more fully for work in the collegiate school of commerce than does the general course. There is too marked a difference between the grades of the specialized students and the grades of the general students for them to be passed over without their receiving a more thorough consideration. I believe the difference may be explained in two ways. Those who elect a specialized course are apt to be possessed of decisive judgment which displays itself in the grades of the students after they enter college. Moreover, the young person who successfully pursues a specialized course for four years has acquired an ability to concentrate, and to think along particular lines, which will prove of inestimable value in any line of endeavor which he may afterwards follow. Nevertheless, it must be remembered that, because of a shortage in entrance credits, a large number of those commercial graduates who would naturally tend to lower the general average have already been eliminated.

It was felt that a study of general averages alone was not sufficient to tell the whole story, and hence a comparison was made of the best and poorest grades of each group, omitting from consideration the solitary agricultural graduate. The records disclosed the following:

Highest average grade made by classical student	93.64%
Highest average grade made by commercial student	93.23%
Highest average grade made by scientific student	86.43%
Highest average grade made by general student	83.6 %
Lowest average grade made by classical student	83.87%
Lowest average grade made by scientific student	83.1 %
Lowest average grade made by general student	76.5 %
Lowest average grade made by commercial student	73.71%

From this it will be seen that the average grade of high school classical students enrolled in a collegiate course in commerce and business administration is fairly indicative of the best and poorest work being done by such students. But, on the other hand, the average grade of high school commercial graduates enrolled in the collegiate course falls far short of being a true index of their varied worth. For although some of our most reliable students have prepared in secondary commercial departments, we find that our poorest students are likewise products of these departments.

Actual figures obtained from college records simply confirm my observations in the class room. A few of those who have finished from commercial departments may be classified as fair; the majority are either above the average, or trail far behind. And the cause?—A lack of standards in our high school commercial education. Many of our city, and a few of our small town high schools offer well-planned commercial courses, have high standards for graduation, and employ a corps of capable, college-trained teachers. But for every one school which may be so designated, it is possible to select two which offer poorly-planned courses, and employ inefficient teachers.

When will our high school authorities learn to plan commercial courses upon a scientific basis, keeping ever in mind the needs of those who will finish and go into business, those who must drop out before finishing a four-year course, and that growing class, those who will continue their education in collegiate schools of commerce and business administration.

The needs of the first two classes are sadly neglected; the needs of the third class are wholly ignored. Too many high schools are still aping the private business school, using its methods, limiting the curriculum to clerical subjects, and in some cases actually falling short of the standards set by private business schools for clerical subjects.

Recently, I talked to a young lady who had secured a position as commercial teacher in a small high school situated in one of the mining towns of Pennsylvania. She is well-qualified to teach; has had a splendid training; and is alive and wideawake. But she is discouraged because of the conditions under which she must work. She has no equipment; the course as prepared by the principal is miserably deficient in the social-commercial subjects; and being in a mining community, there are few business houses with which to come in contact. The mistake is being made in even attempting to continue a commercial department in such an environment. Agricultural or industrial training might fill a need in that school, but a commercial course would always be a farce so far as results are concerned, and an unwarranted drain upon the community finances. The desire to keep pupils in school, and the hope of acquiring a reputation for being up-to-date, lead many a school board to inaugurate a commercial course, when what is really needed is an infusion of new life into the courses already in existence. State departments of education might well discourage unnecessary and ill-advised commercial courses.

On the other hand, many a town with large business interests boasts of a commercial course which is in reality a negligible factor in the achievements of the community. What is needed here is not elimination, but rejuvenation. The commercial course should be revised and enriched so that the work is not limited to strictly clerical routine. Definite aims should be sought; high standards should be set; and above all, the qualifications for teaching commercial subjects should be on a par with those for teaching any other secondary branches.

Where these matters are given proper attention, we find that graduates are not only prepared to offer the necessary credits for entrance to college, but that their preparatory commercial training actually gives them an advantage over the non-commercial graduates enrolled in the Department of Commerce. I am thoroughly convinced that a well-rounded high school commercial course is the best preparation for the collegiate school of commerce. But I am likewise convinced that the high school commercial course, limited to the narrowly clerical branches, and with poorly-trained teachers in charge, is the worst possible preparation for college. Graduates from such departments are lacking in the fundamentals of business training, in English and in the social sciences; they have frequently acquired un-businesslike habits; and the methods used in school have often killed all initiative and dwarfed the power to reason and judge.

Aspects of Vocational Guidance

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I

THE ABILITY TO TALK WELL.*

The Ability to Talk Well is a Necessity in many Occupations and an Asset in all, therefore the School should do Systematic Work in Oral English.

OUTLINE

I. Introduction

Importance of cultivating ability to express oneself accurately and clearly in ordinary conversation.

II. Discussion

1. The Debate.
2. Geography Class.
3. Practically every subject lends itself to the cultivation of Oral English.
4. Fosters real constructive work on the part of the pupil. He thinks for himself on his feet.

III. Conclusion

Oral English. Evaluation of, in terms of a home project that the boy is putting through.

If I were asked to mention the one subject that modern education has neglected and which is recognized by all both as a necessity and as an asset in a democracy, I would mention ORAL ENGLISH. Scarcely a day passes without making its demand upon every individual for accuracy of statement and clearness of expression. Ordinary common sense would seem to encourage the study of ORAL ENGLISH, but as a matter of

* The first of several papers in a very practical and helpful series, to appear in successive numbers of "Education."—The Editor.

fact, we allow opportunity after opportunity to pass without cultivating the art of the spoken word. We have been influenced by the ancients in many ways in modern education. We have read the classics. We have studied the ancient forms. We are able to give the construction of the sentences, but the one thing that the Greeks and the Romans cultivated, the goal of all their education, real ability in conversation, in the ordinary busines sof life, in the market place and in the forum, we have neglected. We have read with special interest the orations of Demosthenes and studied the technique of the speeches of Cicero in our classes. We know what the underlying principle of Oral English is:

"Grasp the subject, words will follows."

"Rem tene, verba sequentur." (Horace.)

We have not put the principle into practice. We do not give adequate opportunity to the pupils to express themselves, in their efforts to develop this power of expression so important in modern life.

The need may be met in several ways. We may form an Oral English class. In this class, we may present topics for discussion. The pupil may be asked to report upon some assigned subject, selected by the pupil from some field in which he is interested. In all the classes the pupils may be given more practice in expressing their ideas. The practice may be extended to the home and to the ordinary activities of life. I would ask the boy who has a home project to give an account of the work. I would relate that discussion to an actual life situation. I want to feel sure that the boy in this activity is right here and now meeting a life situation. Only in this way will we be able to get real and lasting results.

The debating club helps greatly in the acquisition of Oral English, provided the subjects of the debates are selected with care and the pupils are given the benefit of constructive criticism based upon their practice.

Practically every subject lends itself to the cultivation of Oral English. Select a lesson in geography. It is known that

one of the pupils has returned recently from a trip to the section of the country that we have been studying in the geography assignment. The pupil may be called upon to give an account of some specific feature of the country or the people that he has visited. This report by the pupil may have real value from the view point of information. The form of presentation, clearness and accuracy of expression should receive the constructive criticism of the teacher. There may be a nasal twang which has its root cause in some physical ailment. This may be corrected before it gets beyond control. The boy may be shy. The attitude of the teacher may readily inspire confidence. All that the boy needs is assurance. It will not be long before the boy overcomes his hesitancy. In a thousand and one ways, the boys may be guided along the right path. Every case is different. This is why we need teachers who show the ability and who have the time and energy to adapt themselves to the needs of the individual pupils. Much may be done in a quiet way, for a touch here and a touch there will bring large returns later on in life.

Neglect of Oral English suggests the principle

"Everything for the people,
Nothing by the people."

Oral English represents constructive effort by the pupil. It shows up best where the teacher works with the pupil rather than for the pupil. In Oral English the pupil stands upon his own feet. He thinks for himself. In modern life we welcome subject matter that will encourage the pupils to think for themselves and foster clear expression of that thought. This is the contribution of Oral English.

The story is told of Demosthenes, that when he appeared for the first time before the critical, artistic audience of ancient Athens, he stuttered. He was hissed off the stage. Anything ugly or irregular did not tally with the Athenian ideal of the beautiful and the good. That was why Socrates was always an anomaly. So good, yet so ugly in appearance! Demosthenes overcame his difficulty.

1. He copied seven times the history written by Thucydides.
2. He practiced aloud by the seashore.

There are many possible Demostheneses of business, of the arduous activities of life. All they need is the incentive made possible through the right kind of guidance that shows the boy the strategic value of Oral English in the common tasks of life.

In the class of Public Speaking conducted by Professor Winter, there are two representatives from Jordan Marsh Company of Boston. One of these men is head buyer of that firm. Even after winning unusual success, they still feel the need of Oral English, in their efforts to meet the demands of their positions. By vitalizing the work in Oral English this same interest can be aroused in the boy with a real life job, some home project which he is putting through. He will then appreciate as a boy what these representatives of the Jordan Marsh Company are doing in a class in Oral English.

The Place of English in Foreign Language Work

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POOR English in foreign language study is generally accepted as a corollary evil. Many students do not know English grammar well until they begin to study a foreign language. Conversely, a good acquaintance with English, especially English grammar, is a great aid to learning a foreign language. The two interwork, and to some extent, form a vicious circle.

An attempt to correlate English and foreign modern language work in colleges and universities would be better tried out in small institutions, where the work could be watched and checked up more closely. Ideally, such correlation should take place in the high schools, as it is the high school students who occupy the key position and serve up the material for the college. Besides, such correlation, having a practical aim, would be of the greatest good in the high school.

In some colleges, notably flagrant cases are submitted to the special attention of the English Department. Practically, however, nothing is done in the matter—not so much from a laisser-aller policy as because of the increasing specialization and isolation of departments. Whether this should be so, in general, need not be answered here; but for college freshmen, certainly, and perhaps also for sophomores, this state of affairs is not conducive to the highest efficiency.

Errors of English in foreign language work are made by poor students almost exclusively. Occasionally good students commit a stupid blunder; but usually they err on finer points only, where their view may find some justification. For example, if a subject follows a verb, they may translate that verb by a passive to keep the original position of the subject.

By and large, however, students run true to form; and it is the generally poor students whose work is inadequate in English as well as in a particular foreign language.

For the student of low attainment, there appear to be the following chief varieties of error concerned more or less with English: work done mechanically; incomplete knowledge of the subject; general inability to keep to good English; carelessness; looseness of work; inconsistency, illogicality; confusion of what the student thinks a thing should be with what it is; failure of student to realize he is being tested for his knowledge of the subject; some physical defect, as of the eye or ear; pernicious influence of some other language; interworking of English and Spanish spelling (Spanish only is used for illustrative purposes) or grammar; poor English spelling and poor English grammar.

Work done mechanically is chiefly the product of an attitude of indifference. A stupid or incorrigible pupil is a comparatively simple problem; it is the indifferent student, with capabilities but without the flame of ambition, who drags down the moral tone of a class. Errors here committed are machine-like; the mind is started ahead in one groove and keeps on until the impetus is exhausted. The student who wrote: "*h* is always written in Spanish but never pronounced" made a false contrast to the silent character of Spanish *h;* he committed a mechanical error, one devoid of critical judgment. The same boy might have said: "All horses are quadrupeds; therefore, all quadrupeds are horses." On another examination, the teacher put on the board: "Give the sounds of the following letters," and added, in parentheses: "e. g., *k* in *kip.*" Two or three students, coming to the parenthesis, gave the pronunciation of *e. g.* Such a translation as the following is purely mechanical, absolutely free of human reaction: (Se estremecian las carnes y se ponian de punta los cabellos solo de oirla) "The meat was trembling and the hair was made to rise up only by hearing it."

Almost as bad as the mechanical type of student is the one with only partial knowledge. He is never sure. He thinks

it is so and thus, and he has a vague idea of it; but he never *knows* clearly and definitely. This is seen both in his English and Spanish. "*T* is pronounced *like in* English." "Please prepare toda las leccion bueno."

Poor foreign language students have usually little feeling for English. It may be that the quality of their intelligence is wholly inferior. In one fundamental trait, especially, they seem deficient; they do not distinguish between one usage and another, are impervious to language harmony.

"All words which *disobey* this law. . . ."

"Madrid is situated on a plane, and the planes that surround it seem a desert they are so and and without trees."

"The Incas are a class of Indians in Mexico they make up a part of the mixed blood of the Mexicans. They were one of the original classes or tribes who lived in Mexico, when the white man discovered the new world."

"The Incas were a race of Indians inhabitating the North western part of South America four or five centuries ago. The Incas were very advanced to be Indians. Their chief industry was agriculture. The used products which they had grow as money. The king of the Incas would go out once a year to work in the fields setting a good example for his people. He was the head of a large army and with this army conquered many tribes of indians. The incas worshaped the sun. . . . They were conquered by a Spaniard."

A frequent cause of poor English is the habit of slovenliness, a general attitude of carelessness, of willed mental eclipse. Some students show a remarkable lack of circumspection, of self-criticism, as the boy who wrote: "*B* is pronounced the same as *v;*" and three or four lines further on: "*V* is pronounced the same as *b.*" Students are often so careless that they see only partly the sense of an examination question. Asked to give the meaning of certain words plus the gender of each noun, they give only the meaning or only the gender. Many errors, of course, like most errors in English composition, are due to clouded mental processes. "When the adjective clause is in doubt, it takes the subjunc-

tive." Most of the errors could be corrected by any college student if he took the trouble to review his work. The blunders below were passed because the students never bothered to correct their own papers.

"He drank the position (potion) . . ."

"The Spanish built here exactly as they have in Castille. The material is the same, in New York (for *New World*). . ."

"The streets of Havana in the older section the streets are narrow so that when an electric car passes the passerby should take care he is not run over for here the motorists run with their bells and horns ringing a blowing all the time."

"As if by the art of light of Aladino a burried city in spain has been tranported safely and with out alternation to the coast of the Caribbean sea."

There is among the generality of students a lack of the feeling that an original must be translated closely, if not in letter, then in sense. Some students, in translating, when they run into an impasse, exclaim that the original "doesn't make sense!"

In the passages below, there are placed side by side the Spanish original, then an exact English translation, and last a student's translation.

Como acabo de decirte, debe su importancia a su situación. Esta alegre ciudad está situada sobre una península que se extiende en el Río de la Plata formando una bahía. El río, que en realidad es la ancha resembocadura que forman los ríos Paraguay, Paraná y Uruguay al juntarse, tiene en Montevideo una anchura de cien millas (ciento sesenta kilómetros).	As I have just told you, it owes its importance to its situation. This lively city is situated on a peninsula that extends into the La Plata River, forming a bay. The river, which in reality is the wide mouth that the Paraguay, Parana and Uruguay rivers form on meeting, has at Montevideo a width of a hundred miles (a hundred and sixty kilometers).	As has already been said, it is important because of its situation. This active city is situated on a peninsula which extends itself from the Platte River to where it forms a bay. The river, which in reality which is the wide bay which forms the Paraguay, Parana and Uruguay rivers, is about five miles at Montevideo.

Failure to check up on the work and inability to follow the original Spanish often make for nonsense. The passage

quoted below is meaningless and absurd. It indicates the student's failure to realize that the author thought in Spanish as coherently as the student himself is supposed to think in English.

"It is the custom of the spanish, when making a display, to celebrate at the same time an indispensable part of the ceremony. When in 1519 Diego Velasquez de Leon (Ponce de Leon) came in site of Habana, he lowered a silk cotton tree, brought from an Oriental harbor, and in a feast dedicated the place to the ancient mariner."

When the student has not a clear idea of his work, he is likely to put down what he thinks the answer to a question ought to be. Sometimes this amounts to reasoning out the facts with a peculiar twist, so that he reverses relations. In one examination, the students were given two questions: (1) to indicate the sounds of certain letters; (2) to give the names of the letters of the alphabet. The question was put with complete clearness; yet several students answered (1) as they should have answered (2), and (2) as they should have answered (1). This same tendency may lead to changes in the forms of a Spanish word. *Calorifero,* for example, is occasionally spelled *Caloriferio; veinte, viente* or *veinta; ciudad, cuidad;* etc.

An examination, of course, is held to test a student's knowledge, is set for the purpose of determining what parcel of facts he possesses. Many students, however, go through their examinations with a minimum of effort. The only safe course for the student is to pour out on each question all the information he possesses, within the limits placed by the time of the examination and the nature of the questions. To answer cryptically or partially is to court disaster. Asked for the Spanish word for *fish,* a student wrote *pez.* As he had just been drilled on two words for *fish: pez,* a fish in the water; and *pescado,* a fish caught, to be served, the answer was insufficient. It is not enough for the student to know—he must show he knows. One student wrote: "*Than* is expressed nearly always by *que,* but other ways may be used." He

omitted precisely what the teacher wanted to find out that he knew—the distinctions between the *que* way and the "other ways." The same sort of mistake was committed by the student who wrote: "The seven words apocopating are uno, alguno, etc." The use of *etc.* (also given as *&etc.)* is a very frequent device for covering up incomplete information.

Some mistakes are doubtless unavoidable, though preventable. Students with defective eyesight often have the form of words registered erroneously on the memory; and naturally enough, they spell them wrongly. The same can be said of students with impaired hearing. When *armchair* in Spanish is spelled *cillion* (for *sillon); city* has *cuidad* (for *ciudad),* the teacher may suspect, especially if the student is industrious, that something is wrong with that student's eyes or ears. The only course then is to have the pupil's sight and hearing tested, and then have the defect, if one exists, corrected.

A somewhat similar confusion may be caused by the persisting image of a corresponding word or expression from some other foreign language the student has studied. Thus, *secundo* for *segundo, dicamus* for *digamos* are due to Latin influence; *quatre* for *cuatro, wagen* for *vagon* are caused by influence of a French or German word. This fault, a minor one, can be overcome by care and attention on the part of the student himself.

A very frequent source of error is the reciprocal influence of English and Spanish orthography. This is due to carelessness or hurry preventing the student from clearing up in his mind a confusion existing as to two symbols for one idea. The following list shows how this confusion manifests itself.

es (for *is)* Spanish *es*

en (for *in* Spanish *en)*

english (for *English)* Spanish words of nationality have small letter.

december (for *diciembre)* English *December*

Similar grammatical confusions are common.

"A Cuban funeral car is a thing very elaborate . . ."

". . . the harness decorated of (with) black and yellow . . ."

"the house cannot heat itself with coal. . . ."

"In the school of right . . ." (*law,* cf. Spanish *derecho)*

Doubtless some of the errors in English spelling and grammar may be laid to the haste and tribulations of a student taking an examination. But after all is said, the accumulated weight of evidence in individual papers shows that a student errs in English and Spanish on the same test; and that if his work is below class par it is because of a general pathological condition in his case and not because of the special circumstances of the examination. The extracts below illustrate, in the main, common faults of English spelling and composition.

adverbill (adverbial)	monesteries (monasteries)
axcented (accented)	recieved (received)
angles (angels)	sylliable (syllable)
cathederal (cathedral)	spainards (Spaniards)
hurse (hearse)	transfered (transferred)

"On certain days he would work himself, thereby setting a good example."

"The buildings are very large and can be seen by travelers from miles around."

"The streets of Havana are very beautiful. Their is a row of royall palms on each side with beautiful houses and clubs facing them. The streets are paved. This was done after the American intervention."

(Note the general lack of coherence and unity.)

"Whenever a war came up he was always at the head of his tribe leading them into battle."

From the statement just made of the most common types of mistakes, there appear to be three main causes of error: (1) the student's endowed talents; (2) the student's active psychology; and (3) the character of his school. The second and third are obviously capable of improvement; the first is on the knees of the gods. School systems can be improved, and the working of a person's mind is open to some inner

and outer influence; a man's birthright, however, eludes the clumsy tampering of alien forces.

Causes of poor English in foreign language work.

Fundamentally, a good student can maintain a high average in all his work; the poor student, in none. However, a good deal has been made, especially in connection with Latin, of the value of a certain subject for transfer of training, that is, the value of a subject as a discipline. But in the work in English and foreign modern languages, the principle of transfer of training has no marked influence. Three or four years of study in one language solely as preparation for the study of another language may be considered a doubtful investment. It would be better to spend the time directly on the language ultimately to be studied.

Comparative marks indicate that intelligence is uniform in an individual, with minor variations. Of 52 freshmen (or students taking freshman work) examined, the names being taken at hazard, the average grade in English was 3 23/52 (on the basis of 1 the highest mark, 6 the lowest). Of these men, the marks of eight taking Spanish was 3 1/; of twenty-six taking French, 4 5/26; of eighteen taking mathematics, 3 4/18; of nine taking history, 3 4/9. If we consider the marks in English only, the averages in other subjects correspond even more closely to those in English: Spanish, 3 1/8 to English, 3 3/9; French, 4 5/26 to English, 3 15/25; mathematics, 3 4/18 to English, 3 5/18; history, 3 4/9 to English, 3 4/8. As one deduction from these figures, it appears that the good student does well in all his work, the poor student in none, and the average fairly well in some and rather poorly in other work. The variation is concomitant.

The errors caused by confusion of English and Spanish spelling (or that of some other language occasionally) are fairly common, but not important. The mistakes in grammar are more serious. It is conceivable, here, that English-speaking students should make errors on more uncommon idioms; but that they should persistently translate into mutilated Spanish simple sentences based on specific points of grammar

drilled on in class; or that they should translate Spanish into a mongrel English, are matters of no little concern to an exact and painstaking teacher. More than persistent drilling by the teacher is necessary; it is essential that the student's attitude change from one of indifference to one of interest and precision.

The inordinate hurry of the average student to consider an assignment done is largely responsible for poor work. In college, it is not too much to give an assignment of outside work calling for one and a half to three hours of preparation. It is doubtful if the average amount of preparation on Spanish is more than three-quarters of an hour. Most students either stop studying at the end of so much time; or go over an assignment superfiicially so as to get through it in a certain period. Few stay with their work until they know it thoroughly; fewer still divide their preparation into two or three parts. The work is learned mechanically and imperfectly, and is mostly forgotten before the student takes his seat in class.

And at bottom, the problem is that of the poor student. It is no difficulty inherent in English or Spanish, or in the system used, in the text book, or the teacher. A good student learns in spite of handicaps, and the poor student is ever on the lookout for an alibi. The poor student wants to get along on a minimum of effort; accordingly, he resents whatever has even the appearance of being an additional load.

What has already been said may be sufficient to show something of the need of a closer interworking of English and foreign languages. English is a tool which (a symbol of the mind that directs it) is vital to every college man who takes his work seriously; and Spanish, or any foreign language, projects a man's vision beyond the confines of his own mother tongue. Now, the commercial value of Spanish, in view of the small number who ever use it after leaving school or college, pales beside its specific value as a cultural and informative medium, wherein it is ancillary to English. English and Spanish (or French or German or Italian) are more or less kin in their pedagogical value—and Spanish adds even to

the richness of English. As long, therefore, as both are housed in the same temple, there should be some communion between them.

How can this co-operation be worked? Co-operation between the two cannot be effected by requiring English or Spanish teachers to add to their present load. Either both must be lightened of their charge to allow time for the additional work; or new men, specialists perhaps, must be added to take care of the additional work. Such a step must be made definitely, and in regular program; anything other than that, when tried out, does not work. No department need give up its autonomy, either; but each could make definite provision to enlarge some of its own work by a certain co-operation with the other.

One way the plan could work would be as follows. Every Spanish examination of any length has a certain amount of translation from Spanish into English. Papers calling for a fairly extensive passage in English could be corrected by the Spanish examiner for the mechanics of style.

The chief objection here is that the English work can be secured by less indirect ways, and that the first examiner wants the Spanish knowledge irrespective of the garb in which it is clothed. This is a real injustice to the student. It makes his work a series of parallel channels, with no communication between them. Were the history, the civics work, the scientific papers, and so on, subjected to English criticism as well as criticism of subject matter, the general intelligence of the student would be sharpened, he would be more careful all along the line, and the whole level of all work would be slowly but surely raised.

Specialization has been carried too far—many studies are artificial, unrelated to life. We can advantageously continue our specialization, but we must relate specialties one to the other; else, we have a dismembered organism. With the practical trend of modern education, language work, including English, has been subjected to considerable criticism. Nothing could make English a more vital and desirable subject than giving it its proper place in foreign language work.

Biology in the Public Schools

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THERE has been much discussion recently about the indifference, not to say opposition to the teaching of biological science in the public schools. The reasons given for this unfortunate state of affairs may be referred to two heads: faulty methods in teaching; and ignorance or misunderstanding on the part of parents and the public generally, as to the educational value of biology, and their consequent failure to appreciate the reasons which entitle it to a place in our scheme of popular education. Then, too, the growing agitation for vocational training has tended to blind the public mind to the equally pressing claims of cultural training, which is as important to the welfare of the race as vocational training to that of the individual. As usual in such cases, the more immediate and personal interest has obscured the more remote and general, and impressed the mind of the unthinking multitude with the idea that to make a student learn anything that will not be of direct use to him in earning a living is labor thrown away. At the same time, unattractive methods often employed in teaching give the pupils a distaste to the subject, which helps to strengthen the prejudice against it in their homes. By a singular misfit in our educational arrangements, it happens that biological courses have been provided for, mainly, in the high schools of the larger cities, where money is plentiful for laboratory equipment, but conditions are most unfavorable for popularizing the subject. On the other hand, in the strictly rural districts, where the minds of the pupils are responsive and nature is prodigal of material, botany and zoology are practically ignored.

It is not a question here of "pure science," or of training experts for research, but of training the minds of immature boys and girls in scientific habits of thought and broadening

their outlook upon life by a more or less elementary, but so far as it goes, accurate study of life itself. The teacher, if he is anything of a biologist himself, knows that each individual of us epitomizes in his own mental development the successive stages through which the race has passed in the course of its long evolutionary history, and that the average high school boy (or girl) is, with the exception of a much wider experience, in about the same phase of psychological development as the American Indian when Columbus discovered America. He cares nothing for generalities; abstractions bore him, and things alien to his experience are indifferent to him. He is interested in the concrete, the tangible, the visible, and to hold his attention, his studies must be linked with objects familiar to his environment. In the congested districts of large cities like New York and Chicago, suitable material for this purpose is not easy to find, and this difficulty has probably led to a too exclusive adherence to laboratory work, with its generalizations about carbo-hydrates and proteins, and osmosis and photosynthesis, which are apt to prove both irksome and unprofitable to youthful minds unless they have first learned from their own observation, something about the more obvious and striking features—flowers, fruits, leaves, etc., of the plants in which these processes are taking place. It is not within the scope of this paper to suggest details for teaching, but those interested are referred to the admirable paper by Francis T. Hughes of the Boys' High School, Brooklyn, published in *Torreya*, Vol. 19, No. 4.

The second part of our subject—the reasons why biology should occupy a prominent place in the high school curriculum, have been summed up in an able article in the same issue of *Torreya* (Vol. 19, No. 4) by Paul B. Mann of the Evander Childs High School, N. Y., under five heads—of which the two most important are: The imperative need of biology as the most natural means for the presentation of sex hygiene, and the necessity of popular biologic education to insure wise legislation.

In regard to the first point, if the present generation had

been educated in the fundamentals of biology, the much disputed question as to the teaching of sex hygiene in the schools would have settled itself long ago in a perfectly clean and natural way, and we might have been spared the deluge of erotic novels and mawkish picture plays exploiting the adventures of the girl who has gone wrong, under the pretense of giving "sex hygiene"! The veil of mystery in which ignorance and superstition have shrouded the reproductive processes would have ceased to excite prurient curiosity in the minds of young people who had studied them in the simple process of plant fertilization and in the lower forms of animal life, where they are so impersonal, so remote from our own self-consciousness that they can be freely discussed in any company without causing embarrassment. And yet, I have heard a foolish mother object to the study of botany because it teaches about the ovaries, which she considered a very indelicate subject to be mentioned in the presence of young girls!

The existence of ignorance like this among people who pass for educated is a striking demonstration of the need for popular biologic teaching to insure not only a little common sense in dealing with questions of social morality, but for the cultivation of a broader mental vision which looks to the well-being of all mankind. Eugenics, the youngest of the sciences, and the one which concerns the future welfare of the race most nearly, is a direct offshoot from the botanical experiments of an Austrian monk with his sweet peas; and our only hope of improving the human race—if not, indeed, of saving it from deterioration, is dependent upon the wisdom of the legislation enacted by the coming generation, and the intelligent co-operation of the citizens in carrying it out. The problems to be faced are, to a large extent, purely biological ones and can be handled successfully only by a citizenry acquainted with the fundamentals of biology—the science of life. And the only means by which this knowledge can be freely imparted to all, is through the agency of the public schools.

Grouping Students for Work in the Chemical Laboratory

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THE problem of grouping students for laboratory work, especially in sciences which require expensive apparatus, has been in the mind of the writer for several years; largely perhaps, because his experience has been, for the most part, in teacher training institutions. Two conditions prevail in the teacher training institutions which may be responsible for this: First, the instructors in such institutions have uppermost in their minds problems concerning methods of teaching, under which condition the primary interest would be as to whether the student could learn more from his laboratory work, by working alone or with a partner. Second, in such institutions it is generally more difficult to supply the student individually than it is in technical schools and other kinds of schools.

We have been unable to find that any one else has ever collected data on this problem. Teachers in the field must have made considerable observation, but as to collecting data, such would of necessity offer many difficulties. We have been making observations in our own laboratories for fourteen years. The first eight years of this time we collected data. We finally concluded that we could get nowhere with loose observations excepting to allow them to enter into our methods of making up grades for the students observed. We felt safe then in using these grades (providing we considered large numbers of them) from which to draw conclusions. However, these observations were not all upon which we depended in making the grades. We had numerous oral quizzes, frequent written tests, and many laboratory questions in our semi-quarterly

and quarterly examinations. Also we carefully grade notebooks.

In our eight years of observation in which we collected no data, as well as the six years during which we collected data, we noted many conditions which distracted from or aided in furnishing most favorable circumstances for obtaining best educational results from the students' laboratory work.

In the following discussion we are aiming to make an unbiased presentation of these conditions before we give our tabulated data. This will perhaps aid in the interpretation of the data and the explanation of the conclusions. These conditions may be taken as advantages or disadvantages for the different groupings.

In our casual observations we noted some conditions as follows:

Two people working together talk with each other about their work. If they are working at the same experiment they are not so apt to talk about something other than their work as they are if they are working independently but close by each other. If they are doing the same exercise their interests are common. They exchange ideas and stimulate each other. If they are working independently they are liable to be working on different exercises or at different places in the same exercise. They will not have common interest as far as work is concerned and will most likely converse on something foreign to the subject.

The student who says he can think better when alone perhaps remembers only antagonizing influences. The student who says he can think better in the absence of the teacher perhaps has a teacher whose presence embarrasses him.

In most cases students take up the day's work with more courage and confidence if they have companions. This means a great deal to beginners, for in many cases the discouragement disenables the student to think sufficiently to start on a piece of work which would be easily completed if he had only the slightest bit of help on the start. Such a student will remain perfectly helpless until the instructor helps him with the

first step. Under ordinary conditions the first step would be all that would be necessary, but under these conditions, suffering mental stupidity from the discouragement, he is unable to do anything beyond the first step. This student then waits until the instructor can help with the second step and so on. Sometimes this condition prevails with the strongest of minds, especially with girls.

We have had experience with bright students who could master text-book lessons in the finest kind of way but who went at laboratory work with a discouraged mind, not being able to accomplish a thing even with a greater amount of help from the instructor, until that student was given a companion. We have had a few students in our experience to grow despondent, cry and give up before speaking of their troubles because they could not summon courage enough to tackle an exercise alone. We have never had that happen in a case in which two students were placed to work together.

In many cases the apparatus to be worked with is complicated and requires more time of one student, in setting up and adjusting of parts, than is required in the performance of the experiment after the apparatus is arranged. It is inconvenient and expensive to furnish each student with all of the necessary apparatus with which to perform all of the experiment required, therefore much of the apparatus must be obtained from a general stock room. So a great deal of time must be wasted in making trips to and from the stock supply. The ideal way, of course, would be for the student to get all of the apparatus in one trip and return all in one trip. But we have observed that in the majority of cases two or three trips have to be made before all apparatus can be put into form. The same might be said as to weighing and measuring materials. Two people can get this sort of preliminary work done in one half the time required for one to do it. Heating water, generating gas, washing and placing away apparatus is another sort of work which can be done in less time if two students are working at it.

Oftentimes wasteful mistakes are made by individuals or

groups. If two people are working together, one is caught by the other in the mistake and the error is corrected before it is too late. We have more often seen the entire train of apparatus taken down and set up again by the individual student than by the pair of students working together. Time is saved also by students checking on each other as materials are placed together for reactions.

In passing written tests on laboratory work those who have worked alone emphasize the mechanical part of the work more than they do the chemical. This is a habit that beginners in laboratory work are inclined to practice too much under best of circumstances, and if we wish to train against it we must make the conditions such that the chemical fact is the fact that is uppermost in the mind of the student as the work proceeds. For example, if the student is left alone to carry out the process of preparing water by reducing copper oxide with hydrogen, the tedious and difficult work of setting up the apparatus will have made such a deep impression on his mind that he will have lost track of the chemistry of the process, and when he is called upon to tell about the preparation of water by a gravimetic method he will begin and proceed as follows: "Place mossy zinc in a flask fitted with a delivery tube and a dropping funnel, fill the dripping funnel with hydrochloric acid, attach the delivery tube to a combustion tube containing copper oxide, arrange at the opposite end of the combustion tube some "w" tubes containing calcium chloride. Heat the combustion tube with a Bunsen gas burner as you drop the hydrochloric on the zinc. The weight of the tubes before and after the process represents the water formed." Then if any question were raised about the description, the student would claim he deserved full credit for knowing the process because he did as he was told. If the time of arranging the stopper delivery tube and funnel in the flask could be reduced to a minimum and more discussion about the preparations of zinc and hydrochloric to generate the hydrogen and less time and trouble in arranging the combustion tube and more for discussing the copper oxide heating to aid in

the reduction of it with the hydrogen, then less time to the adjustment of the potash tubes and more for the discussion of the absorption of the water, the student might get the chemistry better. When two work together this necessarily reduces the time for the mechanical part. If reasons for arranging the apparatus thus and so present themselves and that part of the work proceeds, two people co-operating will of necessity discuss the problems and more quickly arrive at the correct conclusion.

Then if the heating process, in an experiment like this, or the boiling or any such process in any experiments proceeds, two people can utilize the time to just as good advantage as if one at one experiment and another at another experiment could utilize the same amount of time.

It is really better for both students to have the same spare time on the same experiment than for two students to have some spare time on different experiments, or better yet, than if their spare time comes at different times on different experiments, for they cannot be prevented from taking each others' time discussing, asking each other questions and distracting each other.

In considering students' dispositions, we seemed to see advantages for certain students working alone. In the setting up of apparatus this type of student would take more pleasure in doing the work alone than in having help, and to hear him express it he would rather do it in his way than to watch the awkward student fumble with the materials and if he has done the same identical work before and does not need the drill, he takes all the more pleasure in doing it himself, and all the more displeasure in watching a partner do his part. He is like the executive who would rather do the work than to try to get the other fellow to do it. In other words, he has not the elements of an executive. He may make a good technical worker, and the best thing for him is to have him work alone.

This type of student also likes to do his own thinking and,

while he dislikes to be bothered by the partner undertaking to do his thinking, he dislikes just as much to try to do the thinking for his partner. So suggestions and discussions which are sure to come up are inclined more to throw him off the track than to help him. On his type of mind, everything that is done independently has a more lasting effect and tends to more accuracy in detached work in future technical performances. This student has always appealed to us as having in him the making of an engineer or technician, and his abilities might be cultivated in that direction even though he is in a normal school or teachers college. And we have always felt like advising him to, as soon as possible, get into a school of his kind.

In order to be sure of ourselves in our conclusions, we made a survey of our grades on laboratory work for six preceding years, three of which were taught in the Normal and Industrial School of Ellendale, North Dakota, and three of which were taught in the State Teachers College of Greeley, Colorado. In the Normal School at Ellendale we had no students who had had chemistry in high school, but in the college at Greeley we had students who had had high school chemistry and students who had had no high school chemistry and also some students taking high school chemistry at that time. Of the normal school students we had for the three different years an average of 20% of the students working alone and 80% working in pairs. There we grouped them with the idea of getting two strong students together and two weak ones together.

For the three years in the normal school those working singly totaled twenty-one students and those working in pairs totaled eighty-four students. This gave us twenty-one yearly grades, each made up of three quarterly grades. It represented also forty-two pairs of students having eighty-four yearly grades, each made up of three quarterly grades. The forty-two pairs of students were divided into twenty-one pairs having better grades and twenty-one pairs having poorer

grades. The forty-two grades representing the twenty-one better pairs averaged 89.4%. The forty-two grades representing the twenty-one poorer pairs averaged 82.7%. Of the twenty-one single workers the ten better grades averaged 89.5% and the eleven poorer grades averaged 78.3%. If we put the odd grade on the higher one it lowered the 89.5% to 89.1% and lowered the 78.3% to 78%. So we might reckon the two higher grades practically the same and make the difference of 4.5% in the lower ones.

In the Teachers College for the nine quarters accounted for we had 350 grades on laboratory work. Seventy of these grades were made by students working singly and two hundred eighty of them were made by students working in pairs. 80% of the two hundred eighty grades were made by pairs of students, both of whom had gone through the high school course. Their grades averaged 87.9%. One hundred of the two hundred eighty grades were made by pairs of students neither of whom had gone through the high school course. Their grades averaged 82.5%. The one hundred remaining grades were made by pairs of students, one of whom had gone through the high school course and one had not. The fifty grades of those who had gone through the high school course averaged 88% and the fifty grades of the ones who had not gone through the high school course averaged 84.7%. Thirty of the seventy single workers were high school students of chemistry. Their grades averaged 87.8%. Forty of the seventy single workers were not high school students of chemistry. Their grades averaged 79.7%.

It might be mentioned that 8% of the enrolled students failed in the laboratory work. Of those working alone 10% failed. Of those working in pairs three out of forty or 7.5% failed. We did not add the 7.5% and 10% obtained here and average to get the 8%. The average between these numbers would be 8.75%. But we cut down that answer to the 8% by placing only 20% of the entire enrollment to work singly and allowing 80% to work in pairs. We are not certain that we did the former ten people an injury by not pairing them in

the laboratory, for other things naturally entered in, but it seems as though we might have reduced the percentage of failure to 7.5% by doing so.

We have never had opportunity to gather sufficient data in organic laboratory work. Twelve to sixteen students constituted our classes in this subject. Because of a meager supply of expensive apparatus required and because of the fact that most experiments required more time in the adjustment of apparatus than in the carrying out of the processes after the apparatus was adjusted, we always felt justified in pairing the students off for their laboratory work.

In qualitative analysis the opposite is true. The adjustment of apparatus amounts to practically nothing. Very short processes in test tubes, not much opportunity for discussion but close observation after a mastery of the more fundamental theories seem to call for work by individuals, working singly. Quantitative work consists mostly in skill in manipulation of apparatus, so by no means would we think of grouping students in this.

It may be observed in comparing the grades of those who worked alone and those who worked in pairs that in both the cases of those representing the more capable ones and those representing the less capable ones, that there were wider ranges between the minimum and maximum of those who worked alone than there was for those who worked in pairs. This would indicate that there might have been more of a balancing influence between those working in pairs and that to a certain type of student there was an advantage in working singly and to another type a disadvantage, or that to the very strong student there was an advantage and to the very weak one a disadvantage in working singly. (In several cases as the work progressed we suspected that as referred to above and put the strong student alone, thinking of the student interested and not knowing that we would some time collect the grades for research work.)

It may also be observed that the average of the upper half

of the number of grades, or the grades of the stronger student, in all of the three different cases: where a strong student worked with a strong student, where a strong student worked with a weak student, and where a strong student worked alone, were practically the same, The opposite relations may be noted for the lower half of the number of grades in each case, the better average being for those who worked in pairs.

From these observations we feel justified in concluding:

1. The average strong students are neither benefited nor injured by working in pairs.
2. The average weak students are benefited by working in pairs.
3. The average strong and weak student working together, the strong students are not injured by being paired with weak ones, but the weak ones are benefited by working with the strong ones.
4. Only the mechanical genius is handicapped by being paired with another student and seems to make no difference whether the other student is strong or weak.

As general conclusions we might suggest that in the normal schools and teachers colleges, excepting the occasional student who later expects to get into a school of his type, students may be paired off for laboratory work without any concern as to strength or weakness; and that in the high schools, excepting the few who expect to go on to college and prepare for some sort of practical work, or the occasional one preparing for some sort of simple mechanical routine work, the same thing may be done.

In addition to these conclusions we might remind ourselves that if the students are paired off for their laboratory work, the instructor could handle twice as many students in the laboratory, and that he could save half of the expense in apparatus and materials, which is generally a great benefit to the student as well as to the institution.

American Notes—Editorial

At a recent teachers' meeting in one of our city school systems, one teacher was heard to say, with a sigh, "Oh, it's the same old thing over again, I suppose." If this may be taken as a spontaneous expression of the teacher's feeling, it should contain food for much thought on the part of school administrators. Instead of ascribing it to lack of professional interest, they should regard it as a symptom of conditions that need to be corrected. Perhaps, in a few cases, it may mean nothing more than a lack of professional spirit; but we are inclined to believe that these cases form a very small minority. It *may* mean that the teacher is full of interest in his or her work, but has learned from boresome experience not to expect any profit from the wearisome and commonplace discussions that occupy the time of many such meetings. It may mean that the teacher is carrying too heavy a load, and that, worn out from the day's work, is in no mood to respond to an address from the principal, who doesn't seem to understand the problems anyway. It may mean that the teacher is struggling with difficulties that are beyond his or her power to correct, such as the effort to bring the formal requirements of a course of study and improperly classified pupils together, while the talk of the principal is usually about incidental matters that never seem quite vital. It may mean that help has been expected from others, help that in the nature of the case can never be given, help that only the ingenuity of the individual teacher can supply.

In very many cases the load placed upon the teacher's shoulders is too great. We forget that the work of teaching is more akin to that of the artist than to that of the artisan, and so we expect artistic results from the methods and conditions of the artisan, which we impose. Teaching that is done mechanically by the hour is poor teaching, and if it *must* be done in that way the little spark of artistic genius in the teacher will soon flicker out. The teacher needs encouragement, appreciation, instruction in new and improved methods, and inspiration. These the competent principal can supply. But there are other needs, some of them even more fundamental, that cannot be met at teachers' meetings, and these are the peculiar problems of principal and superintendent.—Contributed.

It seems to be rather popular in junior high school circles, perhaps because of the impressive title, to consider not only undergraduates superior, in an academic way, to those yet enrolled in the traditional grammar grades, but graduates of the former unit also, *ipso facto,* emerging later from senior high school, more fully equipped than those who entered and graduated therefrom via the grade school route. In the absence of extensive investigation in this regard one should be slow in changing impression into conviction. The teachers thereof, being "parties in interest," may expect their opinions to be discounted.

Some years since a nation-wide investigation was made to determine whether the most scientific teaching could be found in the kindergarten, elementary, secondary or normal departments of public school systems. Suffice it to say that the report of the committee showed a practical unanimity of opinion unfavorable to the secondary department of the American public school systems, and the outstanding reason adduced, by proofs submitted, lay in the fact that persons appointed thereto, although college graduates, not infrequently secured such appointment through "influence" rather than superior teaching ability; indeed, in some cities, without *either* examination or teaching experience, thus leaving the latter below standard.

It is a fact, born out of actual experience and conceivable to all except those obsessed with the fetish of college education, that some senior high school principals have occasionally found, even among the uncolleged grade school teachers enrolled in the faculties, persons of superior mind, high purpose and exceptional teaching ability, and, with genuine and abiding interest in the educational advancement of their charges, rather than in a certain sort of glamor attaching to faculty personnel as ordinarily made up, have set out to do battle on occasion in their behalf, and to lay the basis for possible additions from the same source, if sound judgment has suggested such a course. As has been pointed out, results have justified this broadmindedness. Other high school principals, equally interested, have lamented being deterred in this respect by regulation or statute. With Bagley and other educational statesmen continuing to "despair" over "an inefficient American public school system," objections and obstructions to the promotion of teachers, *qualified as indicated,* from elementary to secondary schools, may be at least modified. The persons described are classified in progressive school systems as *exceptions,* and changes with respect to them are not governed by rule or regulation.

Reverting to the original thought, a series of test "sets" given peri-

odically to grammar grade and junior high students might, in the present state of affairs, prove significant in several ways. It would be interesting to learn the attitude of the grammar grade teacher toward the outcome of such a contest.

The following "Disinterested Testimony on the Child Labor Amendment," from the Journal of the National Education Association, page 51, 1925, is self-explanatory, and makes a powerful appeal to all right-minded persons:

"The United States Department of Labor furnishes figures to show that in states where child labor is most common, the percentage of children attending school is lowest. In oyster and shrimp canning communities on the gulf coast, for instance, a large number of children, aged 6 to 15, were found at work. Of these 11% never had attended school. In the Colorado and Michigan beet fields, where children are used in large numbers, the attendance of these children was found to be 20% or 30% less than that of non-working children. In eight Philadelphia schools, from which children are drawn to work on truck farms, it was found that the percentage of absences during the term averaged between 15% and 20%. In one school it was 33%. It should be understood that these children are not the children of truck farmers and that the work does not consist of helping on the farm before and after school, on Saturdays and holidays. They are chiefly city children, who are taken out of school for many weeks in the year to work in the canneries, beet fields and truck farms. Every parent of a child in school knows the vital necessity of regular attendance. Every normal parent endeavors, for the child's own good, to see that attendance is regular, in order that the child may not be discouraged by seeing others advanced beyond it. Every such parent can realize that such child labor is an utterly unfair handicap upon the little folks that are allowed to do this work. So long as there is no federal child labor law to equalize conditions in all states, a lot of little children will be started off in life under this heavy and unfair handicap." (Reprinted from the Washington Daily News, Washington, D. C., November 21, 1924.)

Charles William Eliot, president emeritus of Harvard University, still speaks with telling effect on all things educational. "From the total training during childhood, there should result in the child a taste for interesting and improved *reading,* which should direct and inspire its subsequent intellectual life. That schooling which results

in this taste for good reading, however unsystematic and eccentric it may have been, has achieved a main end of elementary education; and that schooling which has not succeeded in implanting this permanent taste has failed. Guided and animated by this impulse to acquire knowledge and exercise his imagination through reading, the individual will continue to exercise himself all through life."

The fact should be emphasized, moreover, that reading is not merely gaining the thought of others; it must produce creative thought in us. One writer avers that that teacher has succeeded best whose students read one page and think five. In the final analysis it must be remembered—and this applies to other subjects as to reading—that learning is *within* the child, not *without*. It is our business to afford the means by which it may be expressed.

> "And to know
> Rather consists in opening out a way
> Whence the imprisoned splendor may escape,
> Than in effecting entry for a light
> Supposed to be without."

This consideration of the matter brings us squarely up against *method*. However earnestly and honestly one may strive to accomplish the results indicated, it is patent that poor *method* may leave mere effort unavailing. Method is to success in teaching what plan and purpose are to success in life; if lessons have failed for want of the former, lives have failed for lack of the latter. The importance of this matter should not be underestimated. Method, as distinguished from "device," has to do with the serious and purposive means by which a lesson is taught, and does not rest primarily upon the exigencies of a given situation, but is fundamental. Some one has said that the best method, after all is said and done, is "the teacher," and to some extent this is true. Even adults may be inspired to do by coming in contact with a teacher who is a great and good man or woman. There is genius in the teaching profession as well as in the artist world. It appears to be just as unnecessary for the "born" teacher to labor with steps in teaching, or to spend time and thought over the superiority of one method over another, as for the talented artist to ponder over the special treatment to be employed before the masterpiece is produced. The gifted teacher, therefore, while cognizant of the fact in a general way that a good method includes stages of progress, and more or less conscious of their number and order, will neverthless not allow formal method to fetter his own individuality. Thorndike puts it rather aptly: "Moreover, there are gifted personalities to whom scientific and business-like procedures

are alien and even odious, and who should not be required to measure what they are doing or even, in the ordinary sense of the word, to know what they are doing. Their genius is better than efficiency." But he also admonishes, "There are, however, not enough of these to be more than a negligible factor."

The Federal Education Bill, now before Congress, is attracting wide and favorable attention. While some oppose it, fearing overstrict standardization of curriculum and educational procedure, eminent educators are working actively for its passage and have gained a public declaration of support from President Coolidge. In its present unamended form the three outstanding features of the bill are a Federal Department of Education with a Secretary in the President's Cabinet as a research agency, a National Council of Education as an advisory agency, and Federal aid to state educational institutions.

In recognition of the importance of developing keener interest on the part of teacher, pupil and parent in the matter of health, The American Child Health Association, headquarters, New York City, has announced a *health program contest* among all secondary school pupils in the United States, with a prize of $1,000 to be equally divided for the three programs excelling in such factors as permanency, scope, workability, and community and civic significance.

The Statement recently issued by John J. Tigert, Commissioner of the Federal Bureau of Education at Washington, as to the progress of education in the United States during 1924, should receive more than passing notice.

"The year 1924 has continued the unprecedented progress of education which this country has witnessed since the World War. It marked more real achievement than any year yet recorded. Accurate statistics on a national scale are, of course, not yet available. The Bureau of Education on the basis of past experience and such data as it has at its disposal can offer estimates which can be relied upon as reasonably accurate. During the year there were enrolled in the public, elementary and high schools 25,000,000 pupils, of whom about 3,500,000 were in the high schools; there were enrolled in the private and parochial schools about 2,000,000 with 500,000 in the secondary schools; universities and colleges enrolled over 700,000

students; the teachers' colleges and normal schools enrolled 300,000 pupils, of whom about 40,000 were students in the secondary stage; business colleges and commercial schools enrolled 350,000 students. The average daily attendance in public, high and elementary schools was in the vicinity of 20,700,000 pupils. These enrollments can be best appreciated when compared with the year 1900, for example. In the 24 years since 1900, attendance in the public elementary schools has increased 44 per cent; in the public high schools 574 per cent; in the colleges and universities 272 per cent; and in the teachers' colleges and normal schools 274 per cent. Very naturally these enormous increases in attendance have involved a corresponding increase in cost, particularly in view of the fact that by far the largest percentage of increase is in the higher institutions and secondary schools, where costs are, of necessity, much greater than in the elementary schools. It is estimated that the educational bill in 1924 will amount to $1,800,000,000. In the field of rural education, where progress has always been slowest, advance has been marked along many lines during the year just closed. There has been a tendency to supplant untrained and non-professional administrative officials with those who have been fitted by special training for their tasks. More academic and professional preparation has been demanded. More than 25 per cent of the states raised their standard for certificates during the year. Rural teachers' salaries increased on an average of $100, and one state fixed a minimum of $1,200. The length of the rural school term was considerably increased, and there was a corresponding increase in average daily attendance. In the neighborhood of 1,000 school consolidations were made. Expenditures for transportation increased $3,500,000 and about 5,000 one-room schools were closed because of the coming of more adequate consolidated schools. Public education in the cities was marked by the most extensive building program ever yet attempted. It would be impossible to even estimate at this time the amount of money spent during the year for buildings which are now completed or in the process of erection. Los Angeles made available by bond issue during the year about $35,000,000 for school buildings, following upon a $16,000,000 issue in the previous year. One of the outstanding features of progress in the city schools has been the rapid transformation from the old 8-4 traditional system to the 6-3-3 and 6-6 plans, providing for a modern junior high school."

Book Reviews

JUNIOR HIGH SCHOOL MATHEMATICS; First, Second and Third Courses. Revised Edition. By W. L. Vosburgh, F. W. Gentleman and J. O. Hassler. The Macmillan Company.

We are feeling our way slowly in the Junior High School, but we are undoubtedly progressing. In this revised series of Junior High School Mathematics much has been done that should meet with decided approval. There are many Proficiency Tests; pupils keep their scores by graphs. There is a bit of history now and then. Graphic methods are used early and often. Each chapter ends with a summary of review questions. There is continued emphasis upon testing the answer, both by checking and by estimates with round numbers. Intuitional Geometry and Formula are introduced under Measurement and Mensuration in the First Course. The Second Course has, in addition to the Applied Arithmetic, Constructional Geometry, Graphs, Linear Equations, Formulas, and the Metric System. The Third Course is about as close to modern requirements in the ninth grade as it can be. The treatment of Trigonometry is excellent. The last topic, Introduction to Geometry, has been shortened, which is an improvement. We should do something in this line, of course, but cannot do very much. If these three books are measured by the present aims in Junior High School Mathematics, they will be placed exceedingly near the top of the list.—Robert R. Goff.

ELEMENTARY ALGEBRA. By J. W. Hopkins and P. H. Underwood. The Macmillan Company.

This revised edition is intended for a course of one and one-half years in pure algebra. The first ten chapters form approximately a beginners' course, without trigonometry or intuitive geometry. Chapters 1, 2 and 3 are excellent. They are The Language of Algebra, The Formula, and Graphs of Statistics. There is an abundance of simple verbal problems and translations. Factors and fractions do not appear until Chapter VIII, and are kept within reasonable limits. The entire book of 332 pages follows closely the recommendations of the National Committee as to Algebra for High Schools. It includes also the square root of algebraic expressions, complex numbers, and cube root. The chapter on logarithms seems rather short, but probably this is necessary in the average high school. The material throughout is well selected and arranged. The book is plainly a safe, teachable algebra, and hence should appeal to many teachers.—Robert R. Goff.

THE GATEWAY. A Book of Latin Composition for Middle Forms. By E. A. Sonnenschein, D.Litt., C. S. Wilkinson, M.A., and W. A. Odell, M.A. Oxford University Press. Provides practice in the formation of Latin sentences into English, or English into Latin. The explanations and rules are lucid and the lessons are progressive. The book might well be used in preparatory schools. It is characterized by its English (British) thoroughness.

LONGMAN'S HISTORICAL PICTURES. With accompanying book for review. (Longmans, Green and Company.) Subjects in the set received: The Roman Wall; St. Augustine Preaching before King Ethelbert; A Danish Raid; Harold's Last Stand at Senlac; Richard Coeur de Lion's Sight of Jerusalem; King John Seals Magna Carta; Henry V at Agincourt; The Armada in the Channel; Charles I's Visit to the House of Commons; The Death of Wolfe Before Quebec; Trafalgar; The "Dreadnought" in Portsmouth Harbor The set, in small size, 50c, in color.

YOUR LIFE, WRITTEN BY YOURSELF. Dr. Konstantin Issakovich. Published by the author at 368 Sixth Avenue, New York, N. Y. This tells the reader the experience of the author in starting a book of experiences at the time of the birth of a son; which book grew as time went on, until it became a volume, and suggested an ideal of great interest, viz., the writing of a book of experience by everybody, each for himself. Besides the story of the author's life, in condensed form, there are, in this volume suggestions as to the beginning of such a book for and by yourself, dear reader. And blank pages are included, upon which you may write. It is an interesting and excellent suggestion.

ON THE TECHNIQUE OF MANUSCRIPT WRITING. By Marjorie Wise. Introduction by Professor Patty Smith Hill. Charles Scribner's Sons. 80 cents. A mine of wholesome truths and suggestions about acquiring a legible and attractive handwriting,—than which few personal accomplishments are more desirable. EXERCISES IN TRIGONOMETRY. By E. R. Pigrome. A paper-covered pamphlet of examples, worked out or suggested, for first two years in the subject. Price 50 cents. Published by the Oxford University Press.

THOMAS ALVA EDISON. An Intimate Record. By Francis Arthur Jones. $3 net. Thomas Y. Crowell Company. An intensely interesting volume of 416 pages, illustrated. It gives the facts of the great inventor's life and achievements. Our Age is proud of him. Young people should own and read the story as a stimulant to studiousness, patient experimentation, and ambition to be of service to mankind. As a study of personality this book is unsurpassed.

THE NATURE, PRACTICE AND HISTORY OF ART, by H. Van Buren Magonigle (Charles Scribner's Sons, $2), presents the principles of teaching architecture, painting and sculpture, and traces the story to the present time. Numerous illustrations. EARLY STEPS IN SCIENCE, by Hanor A. Webb and John J. Didcoct (Appleton's), is an attractively illustrated volume by means of which children can be interested in the world of Nature and taught the meanings of things that are to be seen, felt and heard all about them. It covers the whole field of Nature. If "brought up" on this volume in the home, the scientific branches in the schools will be elected and become easy. It is a splendid text for elementary school classes, and contains numerous attractive and instructive pictures. Another book for the grades is DEVICES AND DIVERSIONS, by Alhambra G. Deming (Beckley-Cardy Company), a handy book for teachers seeking suggestions for intermediate and grammar grade pupils. It covers the fields of Geography, Arithmetic, Language, use of the Dictionary, etc. SECOND FRENCH BOOK, by Jacob Greenberg, A.M. (Charles E. Merrill Company), is comprehensive and well arranged, has English-French and French-English vocabularies and a very full treatment of French verbs. Two recent and authoritative volumes for teachers, on scientific theories of teaching, are EDUCATIONAL TESTS AND MEASUREMENTS, by Walter Scott Monroe, Ph.D., James Clarence DeVoss, A.M., and Frederick James Kelly, Ph.D. (Houghton, Mifflin Company, $2.40), and AN INTRODUCTION TO TEACHING, by William C. Bagley and John A. H. Keith (Macmillan Company). The latter belongs to the "American Teachers College Series." Both bring to teachers of pedagogy the latest discoveries and advance theories of teaching as a science. EDUCATIONAL JOTTINGS ABROAD, by Raymond Walters (The Science Press), gives a glimpse of the theory and practice of education as seen and used by our brother educators on the other side of the Atlantic. WORKING MANUAL OF ORIGINAL SOURCES IN AMERICAN GOVERNMENT, by Milton Conover (The Johns Hopkins Press), will prove an excellent supplement to the regular college texts on government. Each exercise includes fifty different assignments, one for each student in a theoretic class of fifty individuals. PHYSIOLOGY AND HYGIENE FOR SECONDARY SCHOOLS, by Francis M. Walters, A.M. (D. C. Heath and Company), views the subject from the point of view of both theory and practice; in other words, it gives a foundation of science and then teaches the student how to apply it in his own case and in the community. This book is an excellent one for the classroom course in physiology. THE PLATOON SCHOOL, by Charles L. Spain, Ph.D. (Macmillan). A study of the adaptation of the elementary school organization to the curriculum. Traces the evolution

of the elementary curriculum by periods, from European beginnings down to and into the twentieth century; describes the reorganization of the Detroit elementary schools in 1918-1924; discusses comparative results in platoon and non-platoon schools, relative costs, the personal equation, etc. A thought-provoking little volume!

LABORATORY STUDIES IN EDUCATIONAL PSYCHOLOGY. By Egbert Milton Turner, M.A., and George Herbert Betts, Ph.D. D. Appleton and Company. A book that begins in the right way, with suggestions that open the pupil's mind to the problems of mind and life, set him thinking along new lines and forming habits of analysis and classification of mental facts and experiences as a basis for right living and true understanding of himself and other beings. Typical questions follow each chapter and stimulate original observations and conclusions.

THE OXFORD ADVANCED ATLAS. Second Edition, revised. By John Bartholomew, M.A., F.R.S.E. The Oxford University Press. Price $3.50. An adequate and admirable atlas for school, home, or business office. The color work on the maps is excellent. The Index is comprehensive without being complex. There are Astronomical Maps in the front part of the volume which are informing and interesting. They will aid students of the earth and of the skies. They present graphic explanations of the tides, the phases of the moon, the pathway of the sun, the phenomena of eclipses, etc. The oceanic deposits, the deposits of coal and of iron, coast changes, the theory of earthquakes, and many other subjects that man has come to understand, are graphically portrayed. A copy of this atlas should be available to every pupil in every school, and no home or office can be said to be properly furnished without at least some volume of this kind.

ANIMAL LAND. By Willard Allen Colcord. Philadelphia, The Judson Press.

In this volume the reader will find some three hundred engaging anecdotes and stories of animals, birds and insects, arranged and edited in a manner that will interest adults and young people alike. Much reliable information is imparted on every page, about the characteristics and habits of our friends in fur and feathers. The book is a real contribution to the home and school library, and it will distinctly contribute to the promotion of right thoughts about, and a kind attitude toward, the lower orders of animate life. It is a fine "source book" for "bed-time stories."

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MODERN MATHEMATICS, Seventh School Year, Schorling and Clark. MODERN MATHEMATICS, Eighth School Year, Schorling and Clark. MODERN ALGEBRA, Ninth School Year, Schorling and Clark. Published by The World Book Company.

The authors of these three books have the rare combination of a knowledge of psychology and pedagogy with daily experience in the classroom. Furthermore, they are not bound by tradition, and yet, on the other hand, they proceed with new things slowly and scientifically. As an example of this, they first brought out an experimental edition of these books and had over one hundred and fifty teachers use and criticise them. The content is thoroughly modern and contains, in general, arithmetic and intuitive geometry in grades seven and eight, and algebra and trigonometry of the right triangle in the ninth grade. The language is noticeably planned for the comprehension of young pupils. The authors believe that "the present mathematical difficulties of our classrooms are in no small degree due to unnecessary language difficulties." Two excellent original devices are completion paragraphs and matching tests. But the two features that stand out above all others are the repeated timed practice tests and the continual challenge to the student. There is no doubt that the latter, with its experiments and discoveries, develops self-reliance and initiative; the former vitalizes drill and arouses interest in one's own improvement. These qualities make the books decidedly dangerous rivals of some of the older text books.—Robert R. Goff.

ESSENTIALS OF BUSINESS ARITHMETIC. By G. W. Miner, F. H. Elwell and F. C. Touton. Ginn & Co.

This business-like book is thoroughly modern, both in its content and methods of presentation. It begins with a systematic review of the operations of arithmetic and ends with topics of business problems. It aims to "develop in the student the ability to handle the fundamental operations with numbers rapidly and accurately, and at the same time . . . an understanding of business situations." Such headings as Practical Measurements, Comparing Quantities, and Buying and Selling, are well chosen. There is an abundance of drills and review exercises, and 19 timed practice tests,—enough for the most exacting teacher. The timed tests are now being acknowledged as of proven worth in arithmetic and algebra. No good text book should be without them. From these points then, the book should be rated as of high standard.—Robert R. Goff.